Complete Summary

GUIDELINE TITLE

Displacement, cervical intervertebral disc without myelopathy. In: The medical disability advisor: workplace for guidelines for disability duration, sixth edition.

BIBLIOGRAPHIC SOURCE(S)

Displacement, cervical intervertebral disc without myelopathy. In: The medical disability advisor: workplace for guidelines for disability duration. 6th ed. Westminster (CO): Reed Group; 2009. p. 9. [7 references]

GUIDELINE STATUS

This is the current release of the guideline.

It updates a previous version: Reed Group. Displacement, cervical intervertebral disc without myelopathy. Westminster (CO): Reed Group; 2005. 9 p. [6 references]

** REGULATORY ALERT **

FDA WARNING/REGULATORY ALERT

Note from the National Guideline Clearinghouse: This guideline references a drug(s) for which important revised regulatory and/or warning information has been released.

• December 16, 2008 - Antiepileptic drugs: The U.S. Food and Drug Administration (FDA) has completed its analysis of reports of suicidality (suicidal behavior or ideation [thoughts]) from placebo-controlled clinical trials of drugs used to treat epilepsy, psychiatric disorders, and other conditions. Based on the outcome of this review, FDA is requiring that all manufacturers of drugs in this class include a Warning in their labeling and develop a Medication Guide to be provided to patients prescribed these drugs to inform them of the risks of suicidal thoughts or actions. FDA expects that the increased risk of suicidality is shared by all antiepileptic drugs and anticipates that the class labeling change will be applied broadly.

COMPLETE SUMMARY CONTENT

** REGULATORY ALERT **
SCOPE
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BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS IMPLEMENTATION OF THE GUIDELINE INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES IDENTIFYING INFORMATION AND AVAILABILITY DISCLAIMER

SCOPE

DISEASE/CONDITION(S)

Cervical intervertebral disc displacement without myelopathy

GUIDELINE CATEGORY

Diagnosis Management Rehabilitation Treatment

CLINICAL SPECIALTY

Family Practice Physical Medicine and Rehabilitation

INTENDED USERS

Allied Health Personnel
Health Care Providers
Health Plans
Managed Care Organizations
Physical Therapists
Physician Assistants
Physicians
Utilization Management

GUIDELINE OBJECTIVE(S)

- To create concise, evidence-based, rehabilitation treatment guidelines that follow the purpose and goals of the *Medical Disability Advisor*
- To present a nonadversarial, medically based guideline for returning ill or injured workers to the workplace in a way that benefits the individual and the company

TARGET POPULATION

Patients with cervical intervertebral disc displacement without myelopathy

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis

- 1. History
- 2. Physical exam
- 3. Laboratory blood analysis
- 4. Imaging tests
 - X-ray
 - Magnetic resonance imaging (MRI) or myelography combined with computed tomography (CT)
 - Electromyography (EMG)

Treatment

- 1. Conservative therapy, including rest and intermittent traction
- 2. Pharmacotherapy
 - Nonsteroidal anti-inflammatory drugs (NSAIDs) or steroids
 - Narcotics, antidepressants, anticonvulsants, sedatives, muscle relaxants
- 3. Ice, heat, massage, and ultrasound
- 4. Physical therapy
- 5. Independent home exercise program
- 6. Preventive and maintenance measures (exercise, stress management, and body mechanics)
- 7. Surgery

Rehabilitation

- 1. Exercise
- 2. Pharmacological management
- 3. Heat and cold therapy
- 4. Immobilization with a soft collar
- 5. Ergonomic evaluation
- 6. Psychotherapy
- 7. Cognitive pain management
- 8. Return to work
- 9. Assessment of failure to recover

MAJOR OUTCOMES CONSIDERED

- Pain relief
- Range of motion
- Length of disability
- Return to work

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources) Hand-searches of Published Literature (Secondary Sources) Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Note from the National Guideline Clearinghouse (NGC): The methodology information provided below comes from the "Introduction and Appendix" to *The Medical Disability Advisor, Fifth Edition*. The methodology is divided into two sections: Development of the Disability Duration Tables and The Rehabilitation Guidelines, which were developed by The Occupational and Industrial Orthopaedic Center (OIOC), Hospital for Joint Diseases, New York University Medical Center, on behalf of The Reed Group.

Development of the Disability Duration Tables

Draft Duration Table Development

Over the past 13 years, Reed Group has collected over 5 million workplace absence cases from multinational companies and government organizations to compile the reference database. Reed Group's database consists of actual workplace absence data from a wide range of industries and geographic locations.

For the Fifth Edition, Reed Group collected over 1.65 million new disability cases from the years 2001 – 2003, and these became the basis for the statistical data provided in the Fifth Edition. However, before using this data, stringent cleansing methodologies were applied in order to exclude records that do not necessarily give an accurate representation of disability durations.

Various types of records were excluded from the combined database according to the following criteria: family medical leave cases, disqualified cases, cases without a start or an end date, records with incomplete days or clinical information, and cases without a valid International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) diagnosis or procedure code. Outlier screening, too, was applied in order to prevent atypical cases from skewing the data. A full complement of statistics was produced for statistically significant groups with at least 25 absences.

The Rehabilitation Guidelines

Methods

In order to develop evidence-based guidelines, a uniform search strategy and literature review was implemented for each condition. The OIOC followed these steps:

An OIOC core team was established for the review. This team included a basic scientist, a medical librarian, a physiatrist, and two physical therapists.

The OIOC core team outlined a search strategy that included searches within professional association guidelines and three selected databases:

- PubMed
- Evidence Based Medicine Reviews Full Text Multifile (which includes ACP Journal Club, Cochrane Database of Systematic Reviews, and Database of Abstracts of Reviews of Effects)
- Rand Corporation publications

The following criteria were applied to identify articles for review of each condition:

- Studies published over the past five years (1999-2004), unless no useful information was found in which case the search would extend to the past ten years (1994-2004)
- English language articles
- Research conducted on live human subjects

A hierarchical principle delineated which research studies fitting the above criteria merited inclusion for substantive consideration. Randomized controlled trials were considered the strongest study design, followed by case controlled studies and large cohorts. Systematic reviews were also included in this hierarchy. As mentioned earlier, if the search was unsuccessful for a condition, the OIOC core team then referred to textbooks (those considered and used in medical education), common clinical practice protocols for the condition that were gathered from the consultant network, and existing treatment guidelines offered by various health care professional organizations.

In collaboration with a leading medical librarian at the New York University Medical School Ehrman Library, the OIOC team was able to identify the optimal search strategies. The librarian carried out searches beyond the limits of the search strategy if insufficient information was found utilizing the established criteria.

Each OIOC core team member searched and reviewed the selected conditions independently.

NUMBER OF SOURCE DOCUMENTS

The Rehabilitation Guidelines

Overall, approximately 20 sources were reviewed for each condition.

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus Subjective Review

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Note from the National Guideline Clearinghouse (NGC): The methodology information provided below comes from the "Introduction and Appendix" to *The Medical Disability Advisor, Fifth Edition* (MDA). The methodology is divided into two sections: Development of the Disability Duration Tables and The Rehabilitation Guidelines, which were developed by The Occupational and Industrial Orthopaedic Center (OIOC), Hospital for Joint Diseases, New York University Medical Center, on behalf of The Reed Group.

Development of the Disability Duration Tables

Reed Group employs a two-step process in the development of the MDA disability duration tables. Using reference data and previously released duration tables, the senior staff creates draft disability duration tables that are then reviewed and revised by a medical advisory board who apply their experience and research to the statistical profiles.

Draft Duration Table Development

The respective data sets were integrated into one common database after the completion of extensive data quality investigation and normalization to ensure compatibility of data elements and record constructs. The goal was to capture high integrity measures of total days per disability absence by clinical condition; therefore, the focus was on the accuracy of day accounting and consistency in diagnostic and procedural coding.

The reference data was used as a "starting point" for development of the clinical recovery expectancy figures featured in the disability duration tables. In some instances, the reference data corresponds to the clinical recommendations in the disability duration tables. However, in other cases the reference data shows a considerably longer recovery period than would normally be expected for individuals with a specific medical condition and appropriate case management.

Selection biases account for some of these disparities. For example, pharyngitis (sore throat) is normally resolved before the individual considers applying for disability leave. That is why the MDA provides a Minimum and Optimum of 1 and 3 days respectively. The reference data, however, reflects only those cases of pharyngitis that were so protracted as to involve case management, with the result that the graph shows a mean of 7 and a maximum of 41 days.

In addition to such logical variations, the reference data, being collected from many sources, also reflects variations in case management services between organizations that can significantly affect individual disability duration. The data sets include organizations that manage disability as well as those without case management services, with the result that the statistical profiles take into account variations that do not reflect the ideal, well-managed, uncomplicated cases addressed in the disability duration tables. Other variables, such as an individual's motivation, benefit structure, and corporate culture, may also affect the duration of a disability absence, but cannot be fully accounted for in evaluating reference data sets. Thus, using reference data to establish duration guidelines (such as at the 75th percentile) does not adequately address the issue of "the appropriate duration" for a specific case. Instead, it provides a profile of historical durations without regard to the many factors affecting the duration of a disability.

The Rehabilitation Guidelines

Methods

A consultant network was created to provide expert input on current clinical and case management practices in musculoskeletal expertise and rehabilitation. The network included physicians, chiropractors, occupational therapists, physical therapists, ergonomists and a psychologist. This network was called upon for several round-table discussions and seminars regarding specific conditions and categories of conditions. These clinical experts carefully scrutinized the guidelines, including the frequency tables, prior to distribution to the independent MDA Rehabilitation Board.

Following this review, the assigned reviewer presented a literature synthesis to the OIOC core team. The rehabilitation guideline for each condition was then written on the basis of the literature synthesis and multidisciplinary consensus, including that of the consultant network when indicated.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Note from the National Guideline Clearinghouse (NGC): The methodology information provided below comes from the "Introduction and Appendix" to *The Medical Disability Advisor, Fifth Edition* (MDA). The methodology is divided into

two sections: Development of the Disability Duration Tables and The Rehabilitation Guidelines, which were developed by The Occupational and Industrial Orthopaedic Center (OIOC), Hospital for Joint Diseases, New York University Medical Center, on behalf of The Reed Group.

Development of the Disability Duration Tables

Medical Advisory Board Review and Duration Table Refinement

The first phase of the assessment involves a panel who flags and "corrects" durations that are skewed by factors such as selection bias.

These "corrected" durations are then subjected to the second phase of independent scrutiny. This scrutiny includes two levels of bias protection. First, a panel of experts must deliberate on the proposed ("corrected") durations—drawing solely upon their clinical experience and without recourse to the reference data. Thus this group of experts does not merely replicate the steps established in the first phase. Instead, they approach the durations from another angle, with the result that any lingering discrepancies highlight the need for further investigation. The second protection against bias occurs because this panel of experts operates independently of each other's input, insulating them from premature consensus.

The third phase requires a consolidation of professional opinions. The scrutinized and clinically modified durations are weighed against each other and against the reference data. This entire cycle may be repeated when necessary. In this respect, Reed Group duration guidelines follow the principles of evidence-based medicine: the guidelines result from clinical judgment and experience informed by statistical data, providing a baseline that is both humane and rigorous.

The Rehabilitation Guidelines

The Reed Group subjected each rehabilitation guideline to editorial review. Following this, the OIOC Core Team reassessed each guideline to ascertain that the meaning and intent was not altered during the editorial process. The final quality control measure was an external review by the independent MDA Rehabilitation Board, comprised of leading musculoskeletal, orthopedic, occupational health and rehabilitation specialists.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Diagnosis

History

Important items to note in the history include: information about pain (onset, location, quantity, quality, setting, aggravating and alleviating factors, associated symptoms), axial vs. peripheral pain, and history of neck injury. Disc-related pain without nerve root involvement may be vague and diffuse. Radicular pain can be dull and aching or sharp and electric; neck pain may be absent. The pain may

have begun with no apparent cause, or there may be a history of injury to the neck. If cervical disc displacement of the C5-C6 disc results in radiculopathy, pain may radiate from the base of neck, along the biceps muscle and lateral forearm, and into the back of the hand, the thumb, and the first two fingers. If cervical disc displacement of the C6-C7 disc results in radiculopathy, pain or numbness may be present in the middle finger, along with shoulder pain radiating into the triceps and forearm. These individuals sometimes rest the symptomatic upper extremity on the top of their head to decrease pain. Coughing or sneezing makes the pain worse, and affected individuals may report that they are more comfortable sleeping in a reclining chair than in a bed. If treatment is not sought, individuals may notice increasing weakness in the affected limb. A history of prior or existing systemic illness should be obtained, including chronic disease (e.g., diabetes, heart disease, atherosclerosis, nervous system disorders, arthritis), infections, malignancies, or weight loss.

Physical Exam

Cervical intervertebral disc displacement usually limits range of motion of the neck. The exam may show that neck movement aggravates pain, particularly when bending the head backward (hyperextension) and turning the head from side to side (rotation). The manual application of cervical compression and distraction during the physical exam may help to differentiate between disc pain and pain from other causes. Pain may increase when downward pressure is applied to the top of the head (cervical compression test) and be relieved by traction (cervical distraction test). The affected vertebra may be tender to palpation. Examination should include assessment of muscle strength and changes in sensation and reflexes in the upper extremities. Lower extremities may be examined to rule out signs of myelopathy.

Tests

Laboratory blood analysis may include erythrocyte sedimentation rate (ESR) to evaluate inflammation, white blood count analysis to rule out infection, rheumatoid factor, thyroid and parathyroid studies, and liver function studies. Human leukocyte antigens may be typed. Results of these tests help rule out other conditions.

Imaging studies show the extent of degenerative changes but do not give any information about function. Plain x-rays show narrowing of the disc space and bone spur (osteophyte) formation, if present, as well as possible metastatic disease, spinal deformity, and spine stability. If mechanical instability is suspected as a cause of recurrent pain, it can be documented by x-rays taken with the neck bent forward (flexion) and bent backward (hyperextension).

Magnetic resonance imaging (MRI) or myelography combined with computed tomography (CT) are considered the best ways to diagnose a herniated cervical disc. Electromyography (EMG) may distinguish nerve root compression from a peripheral nerve problem such as carpal tunnel syndrome or ulnar nerve entrapment. Nevertheless, a normal EMG does not rule out nerve root compression. As in the lumbar spine, asymptomatic herniations are frequently seen in normal volunteers. For this reason, disc herniations on imaging studies

must correlate precisely with the clinical signs of nerve root deficit observed on physical examination.

Treatment

Conservative therapy is the first line of treatment except in cases of severe or progressive neurologic compression. Bed rest is rarely indicated. Intermittent traction may be applied, and the individual may be taught to use intermittent traction at home.

Nonsteroidal anti-inflammatory drugs (NSAIDs) may be given to relieve pain and decrease inflammation. If pain is severe, a narcotic may be added; in some cases, an antidepressant or an anticonvulsant may be used for its analgesic effect. If anxiety and tension are prominent, sedatives may be helpful. Muscle relaxants are frequently prescribed; however, their effectiveness probably is due to their sedative action. Narcotics, sedatives, and muscle relaxants usually are used only for brief periods. Ongoing use should be weighed against the potential for addiction or abuse. Other treatments such as ice, heat, massage, and ultrasound therapy may help relieve pain.

As symptoms subside, activity is gradually increased and includes physical therapy to strengthen and mobilize the muscles of the neck and shoulder. An independent home exercise program is an essential component of any physical therapy. Good posture and frequent changes in position may help prevent fatigue and decrease pain. Preventive and maintenance measures, such as exercise, stress management, and proper body mechanics, should be continued indefinitely. If there is no improvement during the first 2 weeks, or if pain is still disabling after 6 weeks, further evaluation is necessary.

Most cases of cervical disc displacement with or without radiculopathy can be managed conservatively. However, surgery is indicated in cases where 1) pain management has failed, and the individual has intractable pain; 2) there is mechanical instability of the spine associated with disc herniation; 3) signs of neurological deficits are increasing (e.g., progressive or severe muscle weakness or severe arm pain with objective signs of nerve root compression); or 4) the disc herniation is massive and compresses the spinal cord causing bowel and/or bladder control impairment, lower extremity weakness, sensory loss, or gait disturbance.

Surgery involves removal of the protruding nucleus pulposus (discectomy). The traditional method for removal of the disc is open discectomy under general anesthesia. A portion of the vertebra that acts as a roof (lamina) over the spinal nerve is removed, creating a small window into the spine. The surgeon then removes the herniated disc material through this opening.

Microdiscectomy, also called minimally invasive spine surgery, is a newer, less invasive alternative to open surgery for certain types of disc herniation. In microdiscectomy, a special operating microscope is used to view the disc and spinal nerves through a small incision in the back. Smaller and lighter surgical instruments are used to remove herniated disc material through the small incision with minimal trauma to surrounding tissue. Many individuals who undergo

microdiscectomy are discharged after overnight observation and have relief of symptoms with minimal pain.

Other new techniques under development include several methods to decompress the disc centrally (chemical, enzymatic, vaporization or mechanical), directed fragmentectomy and anterior cervical interbody fusion.

Fusion of the vertebrae may be indicated when mechanical instability cannot be managed conservatively.

See the original guideline document for information on prognosis and differential diagnoses.

Rehabilitation

The primary focus of rehabilitation for a cervical intervertebral disc displacement without myelopathy is to decrease symptoms and increase function. Although exercise may be uncomfortable initially, individuals must be instructed in the benefits of ongoing exercise in managing the symptoms.

The first goal is to decrease symptoms, primarily pain. In combination with pharmacological management, modalities such as heat and cold can be used. Immobilization with a soft collar is rarely indicated; however, with significant soft tissue pain, it might be necessary for a very short period of time (up to 3 days). While managing pain, individuals can be instructed in gentle exercises. Due to the variability in response, the treating practitioner must pay careful attention to tolerance to treatment. Initial exercises may include isometrics, stretching and/or gentle range of motion. Spinal manual therapy may reduce symptoms when combined with active treatment. Postural training should be initiated as soon as tolerated by the individual.

Once symptoms subside and range of motion is restored, the individual should progress to strengthening and stabilization exercises of the neck, shoulders and upper trunk. Limited treatment with cervical traction has been shown to be beneficial for neck pain when done in conjunction with exercises, although traction must be carefully administered to avoid adverse response.

The individual should also be instructed in a home exercise program to complement the supervised rehabilitation, and trained to care for and protect the neck from recurrence of symptoms. An ergonomic evaluation can prove helpful in avoiding or modifying activities and work positions that may aggravate the symptoms. Psychotherapy may be indicated to support the individual and identify associated factors that may contribute to the symptoms. A short course of cognitive pain management may be beneficial for individuals experiencing psychological distress or lack of improvement with treatment.

Frequency of Rehabilitation Visits

| Nonsurgical Physical Therapist | Up to 12 visits within 6 weeks |
|--------------------------------|--------------------------------|
|--------------------------------|--------------------------------|

Rehabilitation Disclaimer: The table above represents a range of the usual acceptable number of visits for uncomplicated cases. It provides a framework based on the duration of tissue healing time and standard clinical practice.

See the original guideline document for information about comorbid conditions, complications, and factors influencing duration.

Length of Disability

Duration depends on severity of symptoms, length of time the condition has persisted, and response to treatment. Persistent radicular pain from a cervical disc herniation even without myelopathy may not be compatible with heavy work. Disc displacement without radiculopathy may improve rapidly with appropriate management. The only absolute restriction following a cervical discectomy without fusion for individuals with no history of prior spine surgery is no repetitive heavy overhead lifting. Nevertheless, permanent disability may follow a discectomy with or without spinal fusion. This usually is due to persistent neuropathic radicular pain rather than persistent limitation in neck motion or arm weakness. In rare cases, individuals with severe arm muscle weakness are not able to resume heavy or very heavy work.

Surgical Treatment, Cervical Discectomy with or without Fusion (One Level)

| Duration in Days | | | | | |
|------------------|---------|---------|---------|--|--|
| Job Class | Minimum | Optimum | Maximum | | |
| Sedentary Work | 7 | 21 | 42 | | |
| Light Work | 21 | 42 | 56 | | |
| Medium Work | 42 | 56 | 84 | | |
| Heavy Work | 56 | 84 | 112 | | |
| Very Heavy Work | 70 | 91 | 140 | | |

Medical Treatment, Cervical Disc Displacement

| Duration in Days | | | | |
|------------------|---------|---------|---------|--|
| Job Class | Minimum | Optimum | Maximum | |
| Sedentary Work | 0 | 7 | 21 | |
| Light Work | 0 | 14 | 28 | |
| Medium Work | 0 | 21 | 42 | |
| Heavy Work | 0 | 49 | 84 | |
| Very Heavy Work | 0 | 56 | 90 | |

Return to Work (Restrictions/Accommodations)

Individuals with displaced cervical discs usually are advised to avoid overhead lifting or postures with the neck in extension, heavy lifting, or repetitive neck twisting motions. Certain other duties that require extension of the neck (e.g., painting ceilings, stocking overhead shelves) may be unsuitable for individuals with limited range of motion of the head and neck. Individuals may require regular time off for physical therapy. Use of prescription painkillers (analgesics) can affect dexterity and alertness. Their use may require review of drug policies.

Failure to Recover

If an individual fails to recover within the maximum duration expectancy period, the reader may wish to reference the following questions to assist in better understanding the specifics of an individual's medical case.

Regarding Diagnosis

- At what level (discs C2-C7) is the displacement?
- Has individual been exposed to vibrational stress? Heavy lifting?
- Is individual sedentary?
- Has individual had a whiplash injury?
- Does the neck pain radiate to the shoulder and down to the hand?
- Is there weakness in the extremity?
- Is individual more comfortable sleeping in a recliner?
- On physical exam is pain aggravated by neck movement?
- Is the range of motion of the neck restricted?
- Is there tenderness over the affected vertebrae with palpation?
- Have x-rays been done?
- Has individual had an MRI or CT myelogram?
- Has individual had an EMG?
- Have conditions with similar symptoms been ruled out?

Regarding Treatment

- Did individual respond favorably to conservative treatment?
- Was narcotic use necessary? Sedatives?
- Were ice, heat, massage, ultrasound therapy, and intermittent cervical traction used?
- Was surgery necessary? What type of surgery was performed (discectomy, spinal fusion)?

Regarding Prognosis

- Is individual participating in an active rehabilitation program, or is there evidence of dependence on passive therapies? Does he or she utilize a home exercise program?
- Is individual's employer able to accommodate any necessary restrictions?
- Does individual have any conditions that may affect ability to recover?
- Has individual developed myelopathy?

CLINICAL ALGORITHM(S)

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting the recommendations is not specifically stated.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Most cervical disc herniations (an estimated 80% to 90%) improve with conservative treatment.
- With proper selection of surgical candidates, discectomy with rehabilitation has a good outcome in 80% to 90% of individuals.

POTENTIAL HARMS

Narcotics, sedatives, and muscle relaxants are usually used only for brief periods. Ongoing use should be weighed against the potential for addiction or abuse.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better Living with Illness

IOM DOMAIN

Effectiveness Safety Timeliness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2005 (revised 2009)

GUIDELINE DEVELOPER(S)

REED Group - Private For Profit Organization

SOURCE(S) OF FUNDING

REED Group

GUIDELINE COMMITTEE

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

It updates a previous version: Reed Group. Displacement, cervical intervertebral disc without myelopathy. Westminster (CO): Reed Group; 2005. 9 p. [6 references]

GUIDELINE AVAILABILITY

Electronic copies: Available to subscribers from the <u>REED Group Web site</u>.

Print copies: Available from the Reed Group, 10155 Westmoor Drive, Suite 210, Westminster, CO 80021

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI Institute on July 2, 2009. The information was verified by the guideline developer on August 24, 2009.

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